Redefine performance with cutting-edge infrastructure solutions

Lenovo | AMD

Organizations depend on the performance of their IT infrastructure to remain competitive in the marketplace. Utilizing outdated data center technologies, such as servers five years old or more, can result in increased operational and maintenance costs. Their performance lags behind newer servers, often leaving them unable to provide the cutting-edge workloads and capabilities needed to compete effectively in today's business landscape.

Lenovo servers, fueled by AMD processors – a tech duo that's redefining possibilities

From the enhanced memory performance of DDR5 to the ultra-fast data transfer speeds of PCIe Gen 5, Lenovo servers powered by AMD processors set new performance boundaries. In fact, Lenovo servers powered by AMD EPYC™ processors boast an outstanding 120+ benchmarking records.[1] And for a remarkable nine years straight, Lenovo servers have earned recognition as the industry's reliability champion.[2]

Together, Lenovo and AMD are meeting today's increasing IT demands – from AI to Virtualization and beyond – through industry-leading performance, reduced costs and improved organizational results.

High performance: numbers that translate into wins for business

Consolidate your servers

Lenovo V3 servers with 4th generation AMD EPYC™ processors **offer up to 3:1 server consolidation** over older servers, helping to lower costs.[3]

up to 3 to 1 server consolidation

Support more processor cores

AMD EPYC processors in ThinkSystem servers can support **100% more cores** than prior generation ThinkSystem servers.[4]

supports **100%** more cores

Better performance for virtualized applications

Achieve up to 88% better performance for virtualization applications than the previous generation of ThinkSystem servers.[5]

up to 88% better virtualization performance

Get more memory bandwidth

Up to **98%** memory streaming bandwidth improvement with DDR5 over DDR4.[6]

up to 98% more memory bandwidth

Power and speed for AI and ML

Double the data transfer rate with PCI Gen 5 for faster AI inferencing and machine learning.[7]

2x the data transfer rate

Competitiveness requires a modern infrastructure that is powerful, reliable, and highly scalable. It must be ready for "what's next", and able to deliver your data and services and support new and emerging applications.

Infrastructure modernization matters.

The longer you delay, the higher the potential costs and performance setbacks.

Are you ready to take the next step?

[Learn more]

---

[1] https://www.amd.com/en/processors/epyc-world-records as of October 19, 2023.
[2] https://tec-corp.com/itic-2022-global-server-reliability-results/ and https://itic-corp.com/1om-z-ibm-power-systems-lenovo-thinksystem-servers-most-secure-toughest-to-crack/
[3] VMmark 3.1.x results, as of 10/01/23. Two Lenovo ThinkSystem SR665 V3 servers, each with two AMD EPYC 9654 processors, scored 40.66 @ 42 tiles. See https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/vmmark/2023-06-13-Lenovo-ThinkSystem-SR665V3.pdf for further details. Two HPE servers, each with two AMD EPYC 7763 processors, scored 12.76 @ 14 tiles. See https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/vmmark/2019-08-07-HPE-ProLiant-DL385Gen10.pdf for further details. To find out more about VMmark, visit https://www.vmware.com/products/vmmark.html. VMware® and VMware® are trademarks or registered trademarks of VMware, Inc. VMmark VMmark is a product of VMware, Inc. Actual consolidation results will vary based on many factors.
[4] VMmark 3.1 results, as of 10/18/23. Two Lenovo ThinkSystem SR665 V3 servers, each with two AMD EPYC 9654 processors, scored 40.66 @ 42 tiles. See https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/vmmark/2023-06-13-Lenovo-ThinkSystem-SR665V3.pdf for further details. Two previous generation Lenovo ThinkSystem SR665 servers, each with two AMD EPYC 7763 processors, scored 21.58 @ 24 tiles. See https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/vmmark/2021-05-04-Lenovo-ThinkSystem-SR665.pdf for further details. To find out more about VMmark, visit https://www.vmware.com/products/vmmark.html. VMware® and VMware® are trademarks or registered trademarks of VMware, Inc. VMmark VMmark is a product of VMware, Inc.
[5] Lenovo servers with AMD processors offer an improvement of up to 98% in memory streaming bandwidth for Lenovo V3 AMD servers using DDR5 over Lenovo first generation AMD servers using DDR4. Based on Lenovo internal testing comparing the memory bandwidth of Lenovo ThinkSystem V3 servers with AMD Genoa (12 channels of DDR5 @ 4800) to Lenovo ThinkSystem servers with AMD Milan (8 channels of DDR4 @ 3200).
[6] https://www.techtarget.com/searchstorage/definition/PCIe-SSDPCIe-solid-state-drive

Lenovo | AMD